```
10048024 Results
SEO ID NO: 1
RESULT 16
AAW84306
    AAW84306 standard; peptide; 27 AA.
XX
AC
    AAW84306;
XX
DT
    18-MAR-1999 (first entry)
XX
     Finger 3 of a NABP specific for a G12V mutant ras oncogene.
DÉ
XX
     Zinc finger; nucleic acid binding protein; NABP; ras oncogene mutant;
KW
KW
     Cys2-His2 zinc finger; detection; gene therapy; gene delivery.
XX
OS
     Synthetic.
XX
    WO9853059-A1.
ΡN
XX
PD
     26-NOV-1998.
XX
PF
     26-MAY-1998;
                    98WO-GB001514.
XX
     23-MAY-1997;
PR
                    97GB-00010807.
XX
PA
     (MEDI-) MEDICAL RES COUNCIL.
XX
     Choo Y, Klug A, Isalan M;
PΙ
XX
    WPI; 1999-045308/04.
DR
XX
PT
     Preparation of nucleic acid binding proteins - by designing protein
PT
     sequences of a Cys2-His2 zinc finger class based on a nucleic acid base
PT
     triplet in a target nucleic acid sequence.
XX
     Example 4; Fig 5C; 62pp; English.
PS
XX
CC
     The present sequence represents finger 1 of a nucleic acid binding
CC
    protein (NABP) specific for a G12V mutant ras oncogene. The specification
CC
     describes a method for preparing a NABP of the Cys2-His2 zinc finger
     class capable of binding to a nucleic acid base triplet in a target
CC
    nucleic acid sequence. Binding to the 5' base of the triplet by an alpha-
CC
CC
     helical zinc finger nucleic acid binding motif in the protein is
CC
     determined as follows: (a) if the 5' base in the triplet is A, then
CC
     position +6 in the alpha -helix is Glu, Asn or Val; (b) if the 5' base in
    the triplet is C, then position +6 in the alpha-helix is Ser, Thr, Val,
CC
CC
    Ala, Glu or Asn. The methods can be used for designing a protein which is
     capable of binding to any predefined nucleic acid sequence. The NABPs can
CC
    be used for the detection of target nucleic acid molecules. They can also
CC
CC
    be used in gene therapy, e.g. for the delivery of functional genes into
    defective genes, or the delivery of nonsense nucleic acid to disrupt
CC
CC
    undesired nucleic acid
XX
SO
    Sequence 27 AA;
                           4.2%; Score 7; DB 2; Length 27;
  Ouerv Match
  Best Local Similarity 100.0%; Pred. No. 12;
             7; Conservative 0; Mismatches
                                                   0; Indels
                                                                 0; Gaps
                                                                             0;
Qу
         109 HTRTHTG 115
              19 HTRTHTG 25
Db
RESULT 17
AAW78389
    AAW78389 standard; peptide; 27 AA.
ID
хx
AC
    AAW78389:
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XX
     11-MAY-1999 (first entry)
DТ
XX
     Finger #3 of zinc finger targeted to mutant H-ras coding sequence.
DE
XX
KW
     Zinc finger; target sequence; binding assay; mutant;
     phosphorylation site; functional domain.
KW
xx
     Synthetic.
OS
\mathbf{x}\mathbf{x}
ΡN
     WO9853060-A1.
XX
PD
     26-NOV-1998.
XX
PF
     26-MAY-1998;
                    98WO-GB001516.
XX
PR
     23-MAY-1997:
                    97GB-00010809.
XX
     (MEDI-) MEDICAL RES COUNCIL.
PA
XX
PΙ
     Choo Y, Klug A, Isalan M;
XX
DR
     WPI; 1999-045309/04.
XX
PT
     Rules for designing zinc finger nucleic acid binding proteins specific
     for any base quadruplet - relate bases in the quadruplet to specific
PT
PT
     amino acids in the alpha-helical binding motif, used to detect target
PT
     nucleic acids, e.g. for identification of mutants and phosphorylation
PT
     sites.
XX
     Example 1; Fig 1C; 57pp; English.
PS
XX
     This sequence represents finger #3 from a synthesised zinc finger
CC
CC
     targeted to the mutant coding sequence for amino acids 8-16 of the H-ras
CC
     oncogene (AAX16975). The synthesised zinc finger belongs to the Cys2-His2
     zinc finger (ZF) class (AAW78382). The ZF are generated so that they able
CC
CC
     to bind a nucleic acid quadruplet in a target sequence, where binding to
     base 4 of the quadruplet by an alpha-helical ZF binding motif is
CC
CC
     determined as: (a) if base 4 is A, then position +6 in the helix is Gln
CC
     and position ++2 is not Asp (++2 indicates a residue present in an
CC
     adjacent, C-terminal ZF) and (b) if base 4 is C, then position +6 may be
CC
     any residue provided ++2 is not Asp. The ZF are used to detect target
CC
     nucleic acids in a binding assay, e.g. for identification of mutants
CC
     (they can differentiate between single bp changes in the target) or
CC
     potential phosphorylation sites, and to characterise functional domains
CC
     of a protein
XX
     Sequence 27 AA;
SO
                           4.2%; Score 7; DB 2; Length 27;
  Ouerv Match
  Best Local Similarity 100.0%; Pred. No. 12;
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             7; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                  0: Gaps
                                                                              0:
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Qу
              111111
Db
           19 HTRTHTG 25
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AAW84305
     AAW84305 standard; peptide; 28 AA.
XX
AC
     AAW84305;
XX
DT
     18-MAR-1999 (first entry)
XX
DE
     Finger 2 of a NABP specific for a G12V mutant ras oncogene.
XX
KW
     Zinc finger; nucleic acid binding protein; NABP; ras oncogene mutant;
KW
     Cys2-His2 zinc finger; detection; gene therapy; gene delivery.
xx
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os
     Synthetic.
XX
     WO9853059-A1.
PN
XX
PD
     26-NOV-1998.
хx
PF
     26-MAY-1998;
                    98WO-GB001514.
XX
PR
     23-MAY-1997;
                    97GB-00010807.
XX
     (MEDI-) MEDICAL RES COUNCIL.
PΑ
XX
     Choo Y, Klug A, Isalan M;
PΙ
XX
     WPI; 1999-045308/04.
DR
XX
PT
     Preparation of nucleic acid binding proteins - by designing protein
PT
     sequences of a Cys2-His2 zinc finger class based on a nucleic acid base
PT
     triplet in a target nucleic acid sequence.
XX
     Example 4; Fig 5C; 62pp; English.
PS
XX
     The present sequence represents finger 1 of a nucleic acid binding
CC
CC
     protein (NABP) specific for a G12V mutant ras oncogene. The specification
CC
     describes a method for preparing a NABP of the Cys2-His2 zinc finger
     class capable of binding to a nucleic acid base triplet in a target
CC
CC
     nucleic acid sequence. Binding to the 5' base of the triplet by an alpha-
CC
     helical zinc finger nucleic acid binding motif in the protein is
CC
     determined as follows: (a) if the 5' base in the triplet is A, then
CC
     position +6 in the alpha -helix is Glu, Asn or Val; (b) if the 5' base in
CC
     the triplet is C, then position +6 in the alpha-helix is Ser, Thr, Val,
CC
     Ala, Glu or Asn. The methods can be used for designing a protein which is
     capable of binding to any predefined nucleic acid sequence. The NABPs can
CC
CC
     be used for the detection of target nucleic acid molecules. They can also
CC
     be used in gene therapy, e.g. for the delivery of functional genes into
     defective genes, or the delivery of nonsense nucleic acid to disrupt
CC
CC
     undesired nucleic acid
XX
     Sequence 28 AA;
                                                   Length 28;
                           4.2%; Score 7; DB 2;
 Best Local Similarity 100.0%; Pred. No. 13;
 Matches
             7; Conservative
                                0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
          109 HTRTHTG 115
Qу
              Db
           19 HTRTHTG 25
SEQ ID NO: 5
RESULT 7
I66494/c
LOCUS
            I66494
                                    7218 bp
                                               DNA
                                                       linear
                                                                PAT 28-DEC-1997
DEFINITION
           Sequence 14 from patent US 5670367.
ACCESSION
            T66494
            I66494.1 GI:2724471
VERSTON
KEYWORDS
SOURCE
            Unknown.
 ORGANISM
           Unknown.
            Unclassified.
REFERENCE
            1 (bases 1 to 7218)
 AUTHORS
            Dorner, F., Scheiflinger, F. and Falkner, F. Gunter.
 TITLE
            Recombinant fowlpox virus
 JOURNAT.
            Patent: US 5670367-A 14 23-SEP-1997;
FEATURES
                     Location/Qualifiers
     source
                     1. .7218
                     '/organism="unknown"
                     /mol type="unassigned DNA"
ORIGIN
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Query Match 5.5%; Score 72; DB 6; Length 7218; Best Local Similarity 8.3%; Pred. No. 3.7e-10;
       33; Conservative 214; Mismatches 149; Indels
                                            0; Gaps
      911 ACAGTGCAACAAGTCAGGAGACCTAGGTCCTACTCCTGACACTTGCTAATTAGCTCTATG 970
         1 | | | | | | | | |
                        1504 AAACGGCATGTAGGCATCACTGTAATTACCTATCTATGCAAGTAGTTAAAGAGATAGAAG 1445
Dh
      971 ACTCTGGGCAAATCGCATATCTGGGCCTCAGTTTCCTCATCTGTAAAAATGACAGCAAAC 1030
Ov
         Db
      Qу
          Db
      Qу
      1091 AAGGAGCGTAGAACAGACCAAACGAGGCGGCCGCCGAAGGAGACGGAAGCCAGGTGTGGG 1150
         Dh
      1151 CGAGGAGTAAGAAGAGGGGGCGCAGCCCGAAATAAGGGTTGCAGGACCAGCGACCGAG 1210
Qy
          Db
      1211 AGATAGATATACAGAGAGCCGGAGCGAAGAGCACCGCGAGCACACAGCCTCCGCTCCAGCC 1270
Oy
         Db
      Qу
      1271 GAAGAGAGGCCAGCTAACAAGAAGAAACGCAGATGA 1306
         Db
RESULT 1
US-08-232-463-14/c
; Sequence 14, Application US/08232463
; Patent No. 5670367
 GENERAL INFORMATION:
   APPLICANT: DORNER, F.
   APPLICANT: SCHEIFLINGER, F. APPLICANT: FALKNER, F. G.
   TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
   NUMBER OF SEQUENCES: 52
   CORRESPONDENCE ADDRESS:
    ADDRESSEE: Foley & Lardner
    STREET: 1800 Diagonal Road, Suite 500
    CITY: Alexandria
    STATE: VA
    COUNTRY: USA
    ZIP: 22313-0299
   COMPUTER READABLE FORM:
    MEDIUM TYPE: Floppy disk
    COMPUTER: IBM PC compatible
    OPERATING SYSTEM: PC-DOS/MS-DOS
    SOFTWARE: PatentIn Release #1.0, Version #1.25
   CURRENT APPLICATION DATA:
    APPLICATION NUMBER: US/08/232,463
    FILING DATE:
    CLASSIFICATION: 435
   PRIOR APPLICATION DATA:
    APPLICATION NUMBER: US/07/935,313
    FILING DATE:
    APPLICATION NUMBER: EP 91 114 300.6
    FILING DATE: 26-AUG-1991
   ATTORNEY/AGENT INFORMATION:
    NAME: BENT, Stephen A.
    REGISTRATION NUMBER: 29,768
    REFERENCE/DOCKET NUMBER: 30472/114 IMMU
   TELECOMMUNICATION INFORMATION:
    TELEPHONE: (703)836-9300
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TELEFAX: (703)683-4109
   TELEX: 899149
 INFORMATION FOR SEQ ID NO: 14:
  SEQUENCE CHARACTERISTICS:
   LENGTH: 7218 base pairs
   TYPE: nucleic acid
   STRANDEDNESS: single
   TOPOLOGY: linear
  IMMEDIATE SOURCE:
   CLONE: pTZgpt-F1s
US-08-232-463-14
 Query Match 5.5%; Score 72; DB 1; Length 7218; Best Local Similarity 8.3%; Pred. No. 9.7e-12;
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                                  0; Gaps
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                         Db
    1504 AAACGGCATGTAGGCATCACTGTAATTACCTATCTATGCAAGTAGTTAAAGAGATAGAAG 1445
     971 ACTCTGGGCAAATCGCATATCTGGGCCTCAGTTTCCTCATCTGTAAAAATGACAGCAAAC 1030
Qy
       Db
    Ov
        Db
    Qу
    1091 AAGGAGCGTAGAACAGACCAAACGAGGCGGCCGCCGAAGGAGACCGGAAGCCAGGTGTGGG 1150
       Db
    1151 CGAGGAGTAAGAAGAGGGGGCGCGCAGCCCGAAATAAGGGTTGCAGGACCAGCGACCGAG 1210
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        Db
    1211 AGATAGATATACAGAGAGCCGGAGCGAAGAGCACGCGAGCACACACCCTCCGCTCCAGCC 1270
Ov
       Db
    Qу
    1271 GAAGAGAGGCCAGCTAACAAGAAGAAACGCAGATGA 1306
       Db
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